

Title (en)

Spring damping system for the front axle of an agricultural tractor

Title (de)

Feder- und Dämpfungssystem für die Vorderachse eines Ackerschleppers

Title (fr)

Système de ressort et d'amortissement pour l'essieu avant d'un tracteur agricole

Publication

**EP 0773120 A3 19980708 (DE)**

Application

**EP 96116384 A 19961012**

Priority

DE 19541823 A 19951110

Abstract (en)

[origin: EP0773120A2] The suspension system has suspension springs acting between the steered front axle (3) and the vehicle chassis (2). Each has at least one setting cylinder (1), an associated pressure reservoir (7) and a throttle valve (9) between the setting cylinder and the pressure reservoir, for damping the spring movement of the axle. The throttle valve is electromagnetically controlled and regulated, with a sensor (3) detecting the movement of the axle for supplying signals to a control device (11) for the throttle valve.

IPC 1-7

**B60G 17/015**; **B60G 9/02**

IPC 8 full level

**B60G 9/02** (2006.01); **B60G 17/015** (2006.01)

CPC (source: EP)

**B60G 9/02** (2013.01); **B60G 17/015** (2013.01); **B60G 2202/413** (2013.01); **B60G 2202/414** (2013.01); **B60G 2600/182** (2013.01)

Citation (search report)

- [YA] EP 0543321 A1 19930526 - DEERE & CO [US]
- [YDA] DE 4235264 A1 19940421 - KLOECKNER HUMBOLDT DEUTZ AG [DE]
- [A] EP 0512550 A2 19921111 - DEERE & CO [US]
- [A] EP 0266785 A1 19880511 - AHLMANN MASCHINENBAU GMBH [DE]
- [A] DE 3226452 A1 19840119 - INTEGRAL HYDRAULIK CO [DE]
- [A] DE 2038744 A1 19720217 - LIEBHERR HANS E H DR ING
- [A] DE 3512232 A1 19860814 - LIEBHERR WERK EHINGEN [DE]
- [A] DE 3935608 A1 19910502 - HEMSCHIEDT MASCHF HERMANN [DE]
- [A] US 5388857 A 19950214 - WERNIMONT THEODORE A [US], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 327 (M - 635) 24 October 1987 (1987-10-24)
- [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 268 (M - 424) 25 October 1985 (1985-10-25)
- [A] PATENT ABSTRACTS OF JAPAN vol. 095, no. 001 28 February 1995 (1995-02-28)
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 524 (M - 1483) 21 September 1993 (1993-09-21)
- [E] PATENT ABSTRACTS OF JAPAN vol. 097, no. 006 30 June 1997 (1997-06-30)

Cited by

EP1568522A1; EP1175818A3; US6612375B2; US7229079B2; WO03039236A1

Designated contracting state (EPC)

DE FR GB IT

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**EP 96116384 A 19961012**; DE 19541823 A 19951110